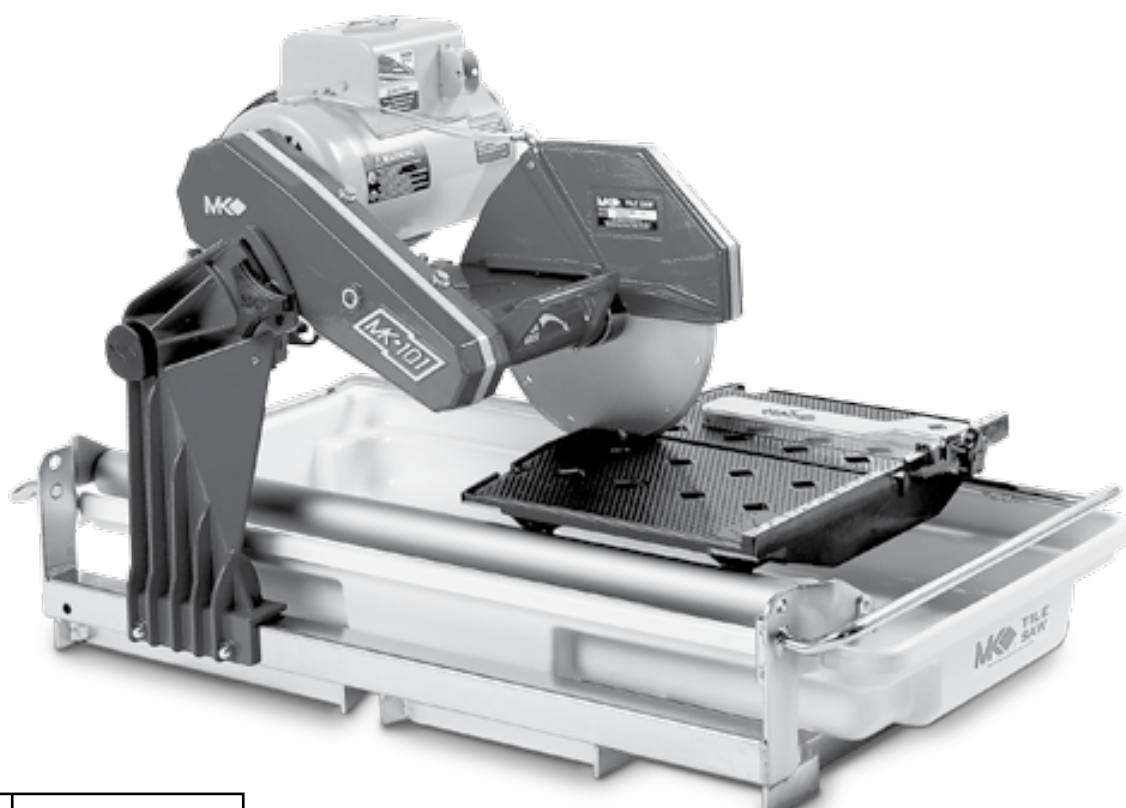


MK-101 TILE SAW OWNERS MANUAL, PARTS LIST & OPERATING INSTRUCTIONS



Revision 101	04.2011
Manual Part# 153754	

Caution: Read all safety and operating instructions before using this equipment. This owner's manual **MUST** accompany the equipment at all times.

INTRODUCTION

We at MK Diamond want to congratulate you on selecting the MK-101 Tile Saw. We are certain that you will be pleased with your purchase. MK Diamond takes pride in producing the finest products in the industry.

Operated correctly, your MK-101 should provide you with years of quality service. In order to help you, we have included this manual. This owners manual contains information necessary to operate and maintain your MK-101 safely and correctly. Please take a few minutes to familiarize yourself with the MK-101 by reading and reviewing this manual.

If you should have questions concerning your MK-101, please feel free to call our friendly customer service department at: 800 421-5830

Regards,

MK Diamond

NOTE THIS INFORMATION FOR FUTURE USE:

MODEL NUMBER:	
SERIAL NUMBER:	
PURCHASE PLACE:	
PURCHASE DATE:	


NOTE: For your (1) one year warranty to be effective, complete the warranty card (including the Serial Number) and mail it in as soon as possible.

INTRODUCTION

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Read and follow all safety, operating and maintenance instructions. Failure to read and follow these instructions could result in injury or death to you or others. Failure to read and follow these instructions could also result in damage and/or reduced equipment life.

SAFETY MESSAGES

A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol () and one of three words: **DANGER**, **WARNING**, or **CAUTION**.



DANGER You **WILL** be **KILLED** or **SERIOUSLY INJURED** if you do not follow directions.



WARNING You **CAN** be **KILLED** or **HARMED** if you do not follow directions.



CAUTION You **CAN** be **INJURED** if you do not follow directions. It may also be used to alert against unsafe practices.

DAMAGE PREVENTION AND INFORMATION MESSAGES:

A Damage Prevention Message is to inform the user of important information and/or instructions that could lead to equipment or other property damage if not followed. Information Messages convey information that pertains to the equipment being used. Each message will be preceded by the word **NOTE**, as in the example below.

NOTE: Equipment and/or property damage may result if these instructions are not followed.

GENERAL SAFETY PRECAUTIONS AND HAZARD SYMBOLS

In order to prevent injury, the following safety precautions and symbols should be followed at all times!

SAFETY PRECAUTIONS



ALWAYS read this Owner's Manual before operating the machine.



ALWAYS keep the Blade Guard in place.



REMOVE ADJUSTING KEYS AND WRENCHES

Form a habit of checking to see that keys and adjusting wrenches are removed from the power tool before it is turned on.



KEEP WORK AREA CLEAN

Cluttered work areas and benches invite accidents.



DO NOT USE IN DANGEROUS PLACES

DO NOT use power tools in damp or wet locations nor expose them to rain. Always keep the work area well lighted.



KEEP CHILDREN AWAY

All visitors and children should be kept a safe distance from work area.

**MAKE THE WORKSHOP KID PROOF**

Make the workshops kid proof by using padlocks, master switches or by removing starter keys.

**DO NOT FORCE THE TOOL**

A power tool will do a job better and safer operating at the rate for which it was designed.

**USE THE RIGHT TOOL**

DO NOT force a tool or an attachment, to do a job that it was not designed to do.

**USE THE PROPER EXTENSION CORD**

If using an extension cord make sure it is in good condition first. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An under-sized cord will cause a drop in line voltage that will result in a loss of power and overheating. TABLE 1, Page 9 shows the correct AWG size to use depending on cord length and name-plate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

**USE PROPER APPAREL**

DO NOT wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may be caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.



ALWAYS wear approved eye protection.



ALWAYS wear approved respiratory protection.

**SECURE WORK**

Clamps or a vise should be used to hold work whenever practical. Keeping your hands free to operate a power tool is safer.

**DO NOT OVERREACH**

Keep proper footing and balance at all times by not overreaching.

**MAINTAIN TOOLS WITH CARE**

Keep tools clean for the best and safest performance. Always follow maintenance instructions for lubricating, and when changing accessories.

**DISCONNECT TOOLS**

Power tools should always be disconnected before servicing or when changing accessories, such as blades, bits, cutters, and the like.



ALWAYS place the power ON/OFF switch in the **OFF** position when the saw is not in use.

**USE RECOMMENDED ACCESSORIES**

Consult the owner's manual for recommended accessories. Using improper accessories may increase the risk of personal or by-stander injury.

**NEVER STAND ON THE TOOL**

Serious injury could occur if a power tool is tipped, or if a cutting tool is unintentionally contacted.

**CHECK FOR DAMAGED PARTS**

Before using a power tool, check for damaged part. A guard or any other part that is damaged should be carefully checked to determine if would operate properly and perform its intended function. Always check moving parts for proper alignment or binding. Check for broken parts and mountings and all other conditions that may affect the operation of the power tool. A guard, or any damaged part, should be properly repaired or replaced.

**DIRECTION OF FEED**

ALWAYS feed work into a blade or cutter against the direction of rotation. A blade or cutter should always be installed such that rotation is in the direction of the arrow imprinted on the side of the blade or cutter.

**NEVER LEAVE A TOOL UNATTENDED**

TURN POWER OFF - Do not leave a tool until it comes to a complete stop. Always turn a power tool OFF when leaving the work area, or, when a cut is finished.

CALIFORNIA PROPOSITION 65 MESSAGE**WARNING**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead, from lead-based paints
- Crystalline silica, from bricks and cement and other masonry products and
- Arsenic and chromium, from chemically treated lumber

For further information, consult the following sources:

<http://www.osha.gov/SLTC/silicacrystalline/index.html>

<http://www.cdc.gov/niosh/consilic.html>

<http://oehha.ca.gov/prop65/law/P65law72003.html>

<http://www.dir.ca.gov/Title8/sub4.html>

Your risk from these exposures varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

HAZARD SYMBOLS

**ELECTRICAL SHOCK**

NEVER touch electrical wires or components while the engine is running. They can be sources of electrical shock which could cause severe injury or burns.

**ROTATING PARTS**

Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the motor with covers, shrouds, or guards removed.

**OVER SPEED**

NEVER tamper with the governor components or settings to increase the maximum speed. Severe personal injury and damage to the engine or equipment can result if operated at speeds above maximum.

**DO NOT EXPOSE TO RAIN**

DO NOT expose to rain or use in damp locations.

**WARNING**

Sawing and drilling generates dust. Excessive airborne particles may cause irritation to eyes, skin and respiratory tract. To avoid breathing impairment, always employ dust controls and protection suitable to the material being sawed or drilled; See OSHA (29 CFR Part 1910.1200).

**WARNING**

Diamond Blades improperly used are dangerous. Comply with American National Standards Institute Safety Code, B7.1 and, Occupational Safety and Health Act covering Speed, Safety Guards, Flanges, Mounting Procedures, General Operating Rules, Handling, Storage and General Machine Conditions

ELECTRICAL REQUIREMENTS AND GROUNDING INSTRUCTIONS

In order to prevent potential electrical shock and injury, the following electrical safety precautions and symbols should be followed at all times!



WARNING

In case of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

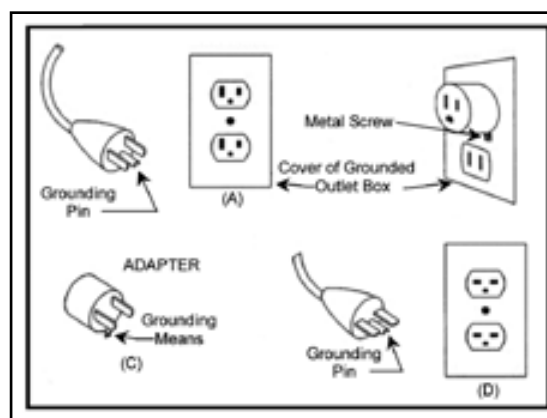
- Do not modify the plug provided – if it will not fit the outlet; have the proper outlet installed by a qualified electrician
- Improper connections of the equipment-grounding conductor can result in a risk of electric shock. The equipment-grounding conductor is the insulated conductor that has an outer surface that is green, with or without yellow stripes. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug
- Repair or replace a damaged or worn cord immediately



WARNING

This tool is intended for use on a circuit that has an outlet that looks like the one shown in Sketch A. The tool has a grounding plug that looks like the plug illustrated in Sketch A. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B, if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box.

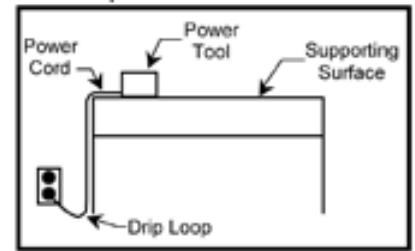
NOTE: Use of a temporary adapter is not permitted in Canada.



**WARNING**

To avoid the possibility of the appliance plug or receptacle getting wet, position the machine to one side of a wall mounted receptacle. This will prevent water from dripping onto the receptacle or plug. A “drip loop,” shown in the picture below, should be arranged by the user to properly position the power cord relative to the power source.

The “drip loop” is that part of the cord below the level of the receptacle, or the connector, if an extension cord is used. This method of positioning the cord prevents the travel of water along the power cord and coming in contact with the receptacle.

**Drip Loop Information**

If the plug or receptacle gets wet, **DO NOT** unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the tool. Then unplug and examine for presence of water in the receptacle.

**WARNING**

Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking “Acceptable for use with outdoor appliances; store indoors while not in use.” Use only extension cords having an electrical rating not less than the rating of the product. Do not use damaged extension cords. Examine extension cords before using and replace if damaged. Do not abuse extension cords and do not yank on any cord to disconnect. Keep cords away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.

**WARNING**

To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch the plug with wet hands.

**WARNING**

Use of under sized extension cords result in low voltage to the motor that can result in motor burnout and premature failure. MK Diamond warns that equipment returned to us showing signs of being run in a low voltage condition, through the use of undersized extension cords will be repaired or replaced totally at the customer's expense. There will be no warranty claim.

To choose the proper extension cord,

- Locate the length of extension cord needed in the table below.
- Once the proper length is found, move down the column to obtain the correct AWG size required for that length of extension cord.

EXTENSION CORD MINIMUM GAGE FOR LENGTH			
VOLTS	TOTAL LENGTH OF CORD IN FEET		
	25 ft. AWG	50 ft. AWG	75-100 ft. AWG
115V	12	10	8
230V	14	14	12

SAFETY LABEL LOCATIONS

Safety labels contain important safety information. Please read the information contained on each safety label. These labels are considered a permanent part of your saw. If a label comes off or becomes hard to read, contact MK Diamond or your dealer for a replacement.

CAUTION

Receptacle is for water pump only. 125V, .6 amps max.

Label A

CAUTION

This saw is to be used with a Ground Fault Circuit Interrupter.

Label B

FOR INFORMATION ON
SERVICE OR WARRANTY

PLEASE CALL
1-800-474-5594

Label C



WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer.

WARNING



For Your Own Safety Read Instruction Manual Before Operating Saw.
Wear Eye Protection.
Disconnect Saw Before Servicing, when Changing Cutting Wheels and Cleaning.
Use Tool Only with Smooth Edge Cutting Wheels Free of Openings and Grooves.
Replace Damaged Cutting Wheel Before Operating.
Do Not Fill Water Bath Above Water Fill Line.
See Manual for Pump Replacement.



Label E

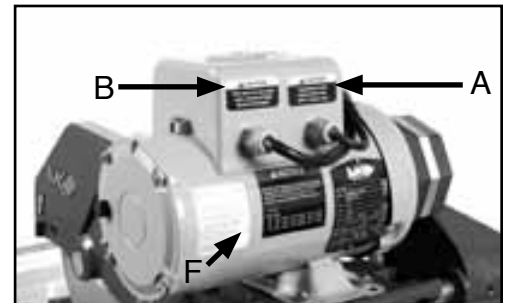
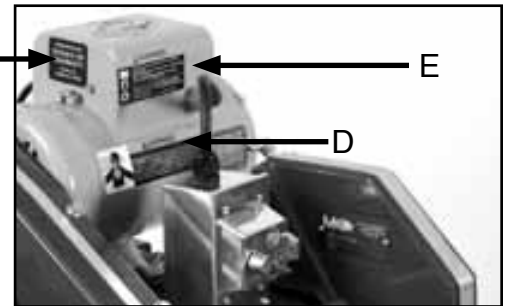
NOTICE

Most Motor Problems are caused by improper voltage and extension cords. Cord should be one-piece and short as possible. Cord selection should match the following table.

1-2 H.P.			
115v 230v			
25'	100'	Max. Cord Length	No. 12 Wire
50'	150'	Max. Cord Length	No. 10 Wire
75'	250'	Max. Cord Length	No. 8 Wire

Label F

Label D



Tile Master Label Sheet Part#166012

Decal/Label	Location	Description
A	Motor - Back	Caution - Receptacle is for Water Pump Only
B	Motor - Front	Caution - Use with GFCI outlet only
C	Motor - Side	Service/ Warranty
D	Cutting Head - Front	Warning - Silica Warning
E	Motor - Side	Warning - Read Owners Manual
F	Motor - Back	Notice - Voltage/extension cords

TILE SAW SPECIFIC WARNINGS



WARNING

Wear eye protection.

Use splash guard for every operation for which it can be used.

Disconnect saw before servicing, when changing cutting blades, and cleaning.

Replace damaged cutting blade before operating.

PRODUCT SPECIFICATIONS:

The MK-101 is a versatile Tile Saw. Operated and used according to this manual, the MK-101 will provide years of dependable service.

General Specifications:

The MK-101 Tile Saw is engineered as a tabletop or stand mounted wet tile saw. The saw includes a powerful 120V totally enclosed capacitor start Baldor motor with a thermal protective overload. The saw is capable of cutting tile up to twenty (20) inches in length, or diagonal cutting tile up to fourteen (14) inches. The saw can cut an object three (3) inches thick in one pass.

Motor Specifications:

Motor specifications for the MK-101 are listed in Table 2 below.

Voltage	120V
Overall Amperage	13
Motor Only Amperage	12.6
Frequency	60 Hz
RPM	3450 rpm
Horse Power	1.5 hp
Weight	92 lbs

Thermal Overload Protection:

The motor is protected by a thermal overload equipped with a manual reset.

Blade Capacity:

The MK-101 uses a ten (10) inch (254mm) diameter, wet cutting continuous rim, diamond blade with a five-eighths (5/8) inch (15.875 mm) arbor.

Tile Types:

The MK-101 can cut a variety of tile types including Porcelain, Terracotta, Marble, Quarry and Slate, or almost any other non-ferrous material.

NOTE: The MK-101 is not designed to cut plastic or ferrous (metals) material.

UNPACKING:

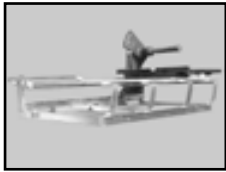
Your MK-101 has been shipped from the factory thoroughly inspected. Only minimal assembly is required.



CAUTION Use proper lifting techniques when lifting the MK-101.

CONTENTS:

In your container, you will find one (1) MK-101 frame and water basin, one (1) MK-101 Cutting Head, one (1) 10-inch wet cutting continuous rim diamond blade, one (1) adjustable cutting guide, one (1) electric water pump, one (1) pump discharge fitting, one (1) cooling transfer tube, one (1) flow adjusting clamp, one (1) drain plug, one (1) blade wrench, one (1) splash guard, one (1) owners manual, one (1) pump manual and one (1) warranty card.



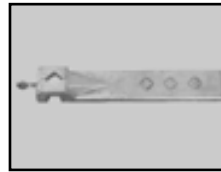
MK-101 Frame
and Water Basin



MK-101
Cutting Head



Diamond Blade



Adjustable
Cutting Guide



Electric
Water Pump



Pump
Discharge Fitting



Cooling
Transfer Tube



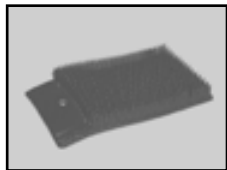
Flow
Adjusting Clamp



Drain Plug



Blade Wrench



Splash Guard



Owners Manual



Pump Manual

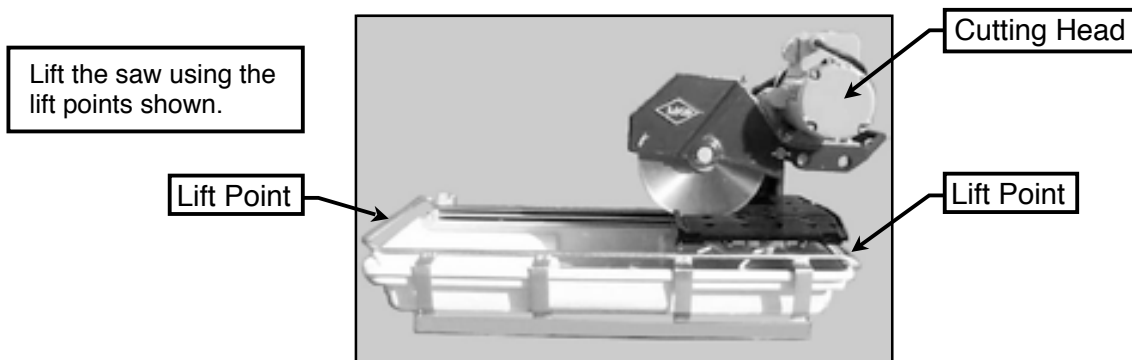


Warranty Card

TRANSPORT:

- CAUTION**
1. The MK-101 weighs approximately ninety-two (92) pounds.
 2. Never transport the MK-101 with water in the Water Basin.

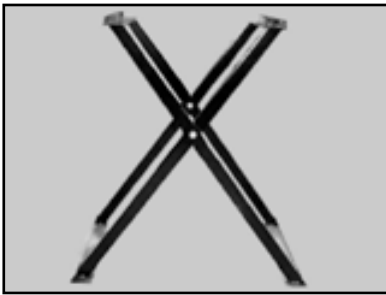
The MK-101 is designed with a rigid frame and removable Cutting Head. Two people are required to transport the MK-101 with the Cutting Head installed. Remove the Cutting Head if one person is transporting the saw (see Cutting Head Installation and Removal in the following section).



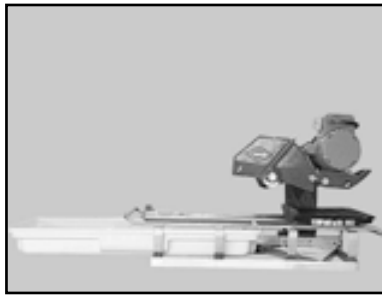
UNIVERSAL STAND:

The MK-101 weighs approximately ninety-two (92) pounds; follow the guidelines for transport in the TRANSPORT section, when placing it on the stand.

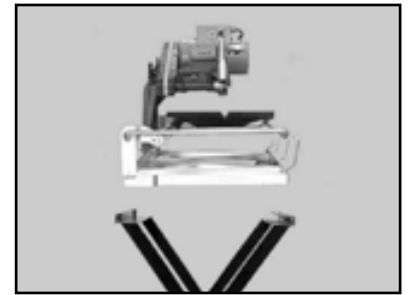
NOTE: If using the MK Diamond, Universal Stand, follow the following steps.



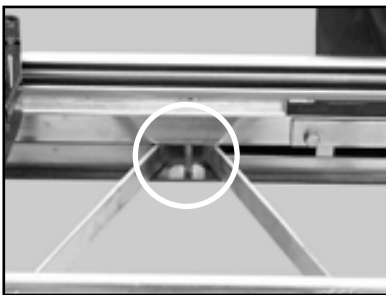
(A)
Open the Universal Stand and
place on flat surface



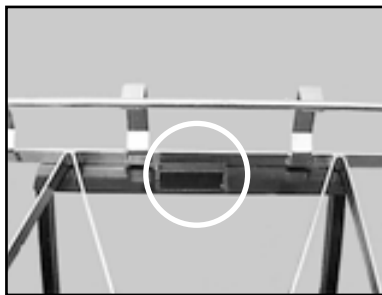
(B)
Remove Water Basin.
Orient the Saw to the Stand



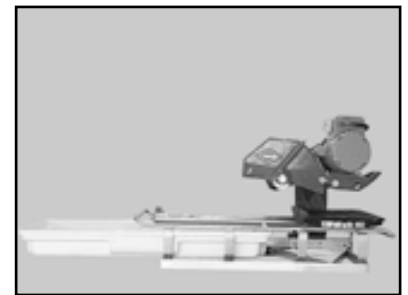
(C)
Place saw on Stand



(D)
Seat Left (Post) Side of saw onto
stand between stand
Orientation Pin



(E)
Seat Right Side of saw onto
stand between stand and
Register Angle



(F)
Reinstall the Water Basin

ASSEMBLY

Follow the assembly instructions to prepare your MK-101 for operation.

Cutting Head Installation:

NOTE: If the cutting head is installed, go to the next step.



(A)

Align Cutting Head rear Pivot Hole to the Post Pivot Shaft and slide onto shaft



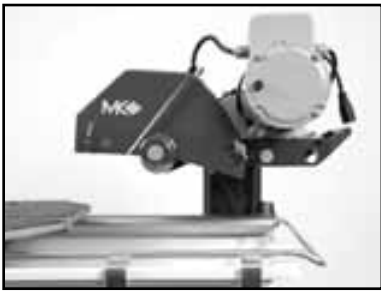
(B)

Ensure Cutting Head Stop is in upward position



(C)

Install the Cutting Head onto the Post Pivot Shaft and install the Adjusting Knob



For maximum cutting length, the Cutting Head should be in the front pivot hole and the Post should be in the rear post retaining hole.

NOTE: For small tiles (6" tile or smaller) the Cutting Head should be in the rear pivot hole and the Post should be in the forward post retaining hole. For large tiles and maximum cutting length, the Cutting Head should be in the front pivot hole and the Post should be in the rear post retaining hole.

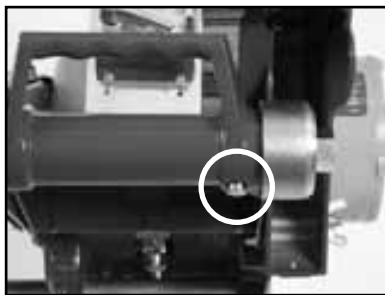
NOTE: Move Cutting Head Stop in upward position when using rear pivot hole and in the down position when using front pivot hole, refer to page 24.

Diamond Blade Installation:

NOTE: When installing the Retaining Nut, do not “cross-thread” and DO NOT over tighten.



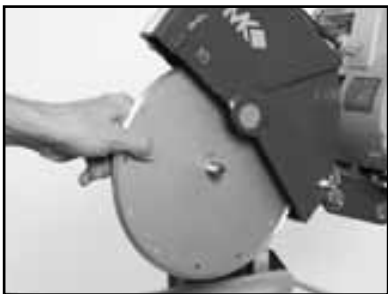
(A)
Position Movable Cutting Table
to the front of the saw and
raise the Blade Guard.
Tighten wing-nut



(B)
Locate the Shaft Lock push
button on the underside of
the Cutting Head



(C)
Depress and hold the Shaft
Lock pushbutton and remove
Retaining Nut and Outer
Flange using the Blade Wrench



(D)
Install Diamond Blade
onto Blade Shaft



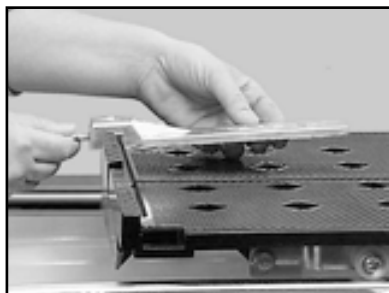
(E)
Verify the Blade is seated on
the Blade Shaft and direction
of rotation is correct



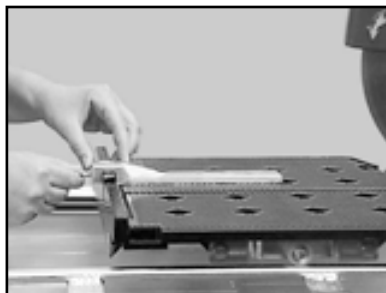
(F)
Install Retaining Nut and Outer
Flange, depress and hold the
Shaft Lock pushbutton
and tighten

Adjustable Cutting Guide Installation:

NOTE: The Adjustable Cutting Guide can be used on either side of the Diamond Blade.



(A)
Loosen Adjustable Cutting
Guide retaining thumbscrew
and place it over the Movable
Cutting Table Ruler/Stop



(B)
Place the Adjustable Cutting
Guide onto the Movable Cutting
Table Ruler/Stop and tighten
the retaining thumbscrew

Splash Guard Installation:

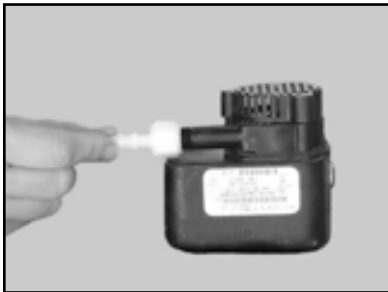
(A)

Install the retaining thumbscrew through the washer and Splash Guard then align to the hole found on back of the Blade Guard



(B)

Install the Splash Guard onto the Blade Guard

Water Pump Preparation:

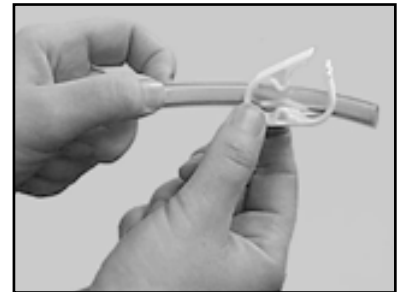
(A)

Install Water Pump Discharge Fitting



(B)

Press one end of the Cooling Transfer Tube onto the Water Pump Discharge Fitting



(C)

Slide Cooling Flow Adjusting Clamp onto the Cooling Transfer Tube

SETUP:Pre-start Inspection:

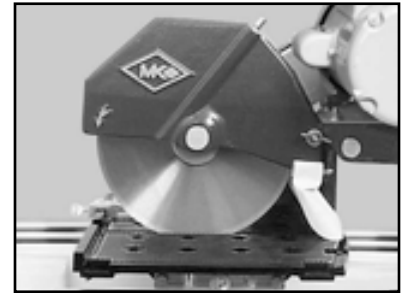
Prior to beginning work, a pre-start inspection of the saw should be performed.



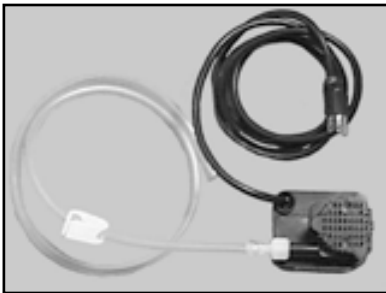
(A)
Ensure the ON/OFF Switch is in the OFF position



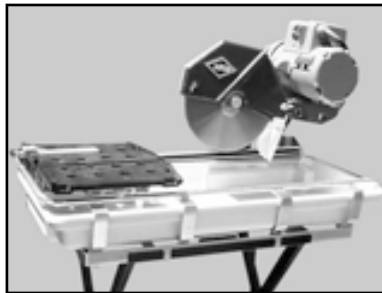
(B)
Verify the Movable Cutting Table moves freely



(C)
Inspect the Diamond Blade for damage – verify the blade is correct for the material being cut



(D)
Inspect the Pump Assembly for damage – ensure the cord is free of cracks or cuts

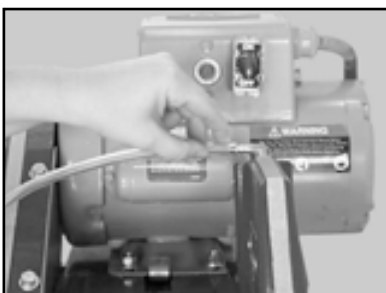


(E)
Inspect the MK-101 for damage

Connecting the Water Pump:**WARNING**

1. To prevent the possibility electrical shock, the MK-101 MUST be de-energized when connecting the Water Pump.
2. To prevent the possibility of electrical shock, use only MK Diamond qualified replacement parts

NOTE: To prevent pump damage, the Water Pump must be disconnected if cutting with a Dry Blade.



(A)
Connect the Cooling Transfer Tube to the inlet connection of the Blade Guard



(B)
Connect the Water Pump power cord to the connection found on the motor



(C)
Place Water Pump in Water Pan

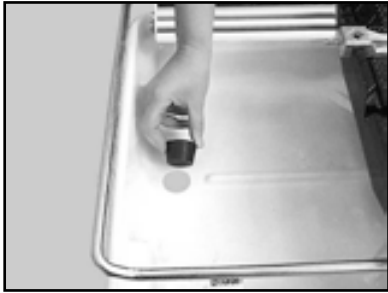
Water Pump Setup for Operation:

The Water Pump can be setup for operation in two ways, External Water Source or Re-circulation.

NOTE: If using a dry blade for operation, DO NOT connect the water pump.

I. External Water Source:

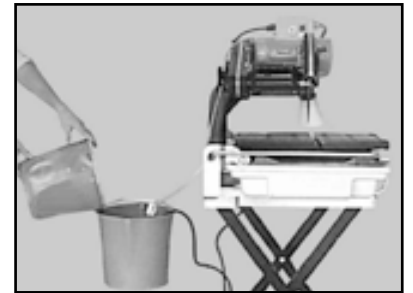
This is the preferred method of cooling.



(A)
Remove the Drain plug



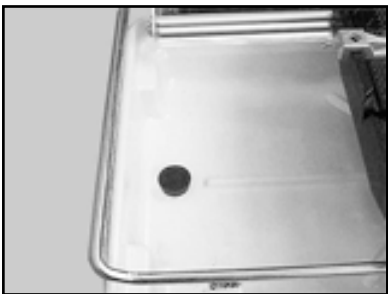
(B)
Place the Water Pump
In an external container



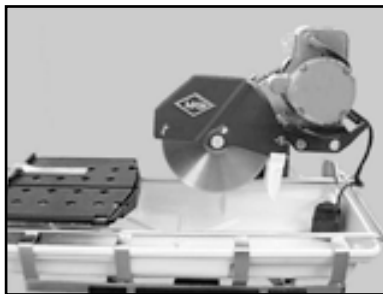
(C)
Fill the external container until
water completely covers the
Water Pump suction

II. Re-circulation:

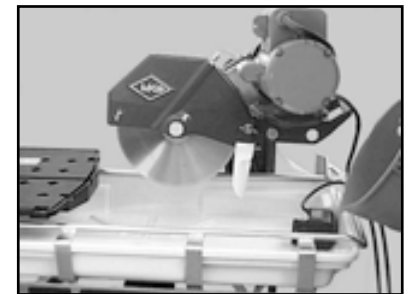
NOTE: When using the re-circulation method, the water should be changed often for longer pump life.



(A)
Ensure the Drain Plug is
installed in the Water Basin



(B)
Place the Water Pump in the
back of the Water Basin



(C)
Fill the Water Basin until water
completely covers the Water
Pump suction area

MK-101 SETUP:**CAUTION**

1. Before powering or starting, check for damage that could prevent this equipment from proper operation or performing its intended function. Check for binding and alignment of moving parts. Check for damaged, broken, or missing parts.
2. Verify the On/Off switch is in the OFF position.
3. Before connecting the MK-101 to a power supply, be sure the voltage, cycle and phase of the job site power source meet the requirements of TABLE 3

VOLTAGE:	120V
CYCLE:	60hz
PHASE:	1-phase

TABLE 3

4. If using an extension power cord, make sure, the length and wire gauge correspond to the requirements listed in TABLE 1 on page 9. An extension power cord that is too small in wire gauge (diameter), or too long in length, will cause the motor to overheat and could cause premature failure.
5. Use an approved Ground Fault Circuit Interrupter (GFCI)
6. Do not cover the motor vents as this could lead to motor overheating.

NOTE: In order to avoid breaker tripping, a 20-amp circuit breaker should be used.

Portable Generator:

If using a portable generator, ensure the generator meets the following minimum requirements:

5 KW

120/240 volts

41.7/20.8 amps

Single Phase



(A)

Ensure the ON/OFF Switch is in the OFF position



(B)

Plug MK-101 into the GFCI



(C)

Plug the GFCI into the Power source *

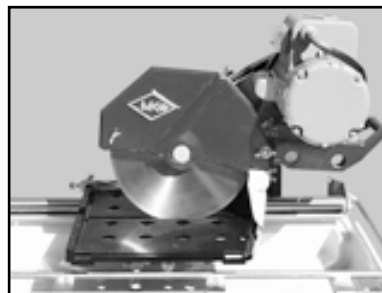
Set Cutting Depth:**CAUTION**

When loosening the Cutting Head Adjusting Knob, the Cutting Head will pivot down unless held.



(A)

Loosen Cutting Head Adjusting Knob by turning counterclockwise



(B)

Set cutting depth approximately 1/4 to 1/2 inch below the surface of the Movable Cutting Table



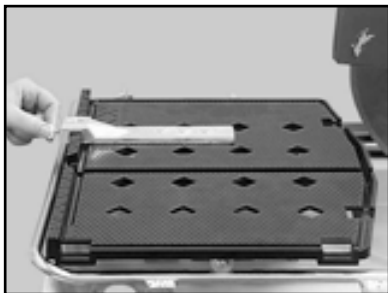
(C)

Ensure the Adjusting Knob is tight, turn clockwise

* A GFCI wall socket is the preferred protective device.

OPERATION:Cutting Straight Edges:

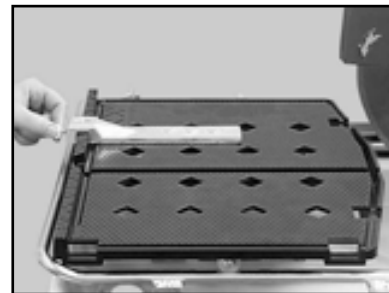
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



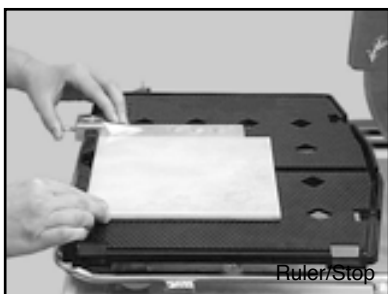
(A)
Loosen the Adjustable Cutting
Guide retaining thumbscrew



(B)
Position the Adjustable Cutting
Guide to desired cut length



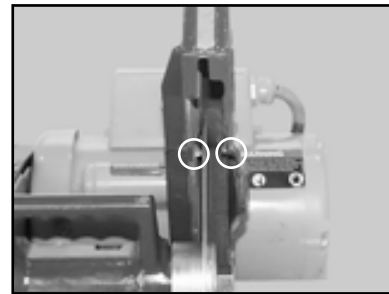
(C)
Tighten the retaining
thumbscrew



(D)
Place the tile against the
Ruler/Stop and Cutting Guide



(E)
Turn the motor ON



(F)
Verify proper cooling flow on
both sides of the blade (See
Maintenance Section to in-
crease/decrease flow)



(G)
Perform the cut

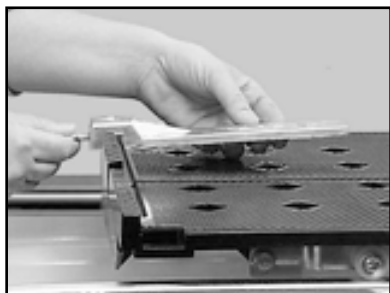


(H)
Turn the motor OFF when work
is complete

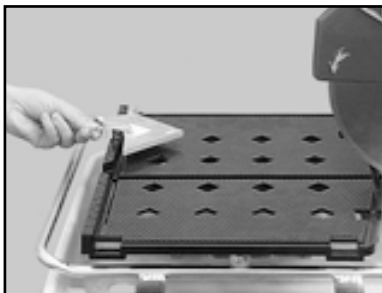
Diagonal Cutting:

NOTE: To cut diagonal, the Dual 45° Flat Angle Guide (MK Diamond Part No. 134557-MK) should be used.

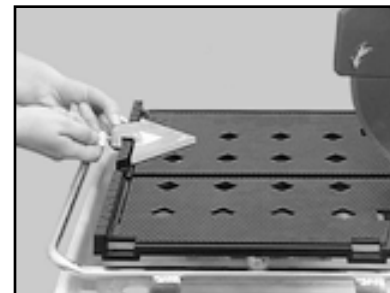
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



(A)
Remove the Adjustable
Cutting Guide



(B)
Place the Dual 45° Flat Angle
Guide on the Ruler/Stop

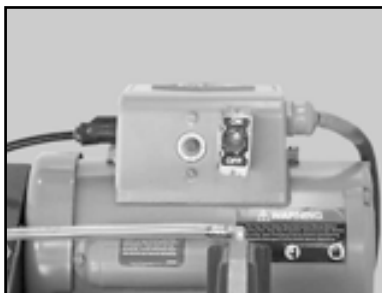


(C)
Position the Dual 45° Flat
Angle Guide and tighten the
retaining thumbscrew

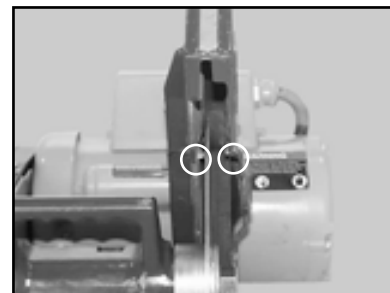
NOTE: If Cutting the tile in two equal halves, align the tile in the V-notch of the Movable Cutting Table Ruler/Stop.



(D)
Position the tile against the
Dual 45° Flat Angle Guide and
the Ruler/Stop



(E)
Turn the motor ON



(F)
Verify proper cooling flow on
both sides of the blade (See
Maintenance Section to in-
crease/decrease flow)



(G)
Perform the cut



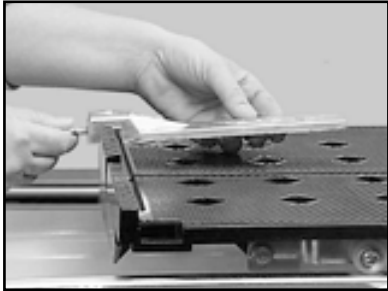
(H)
Turn the motor OFF when work
is complete

45° Miter Cutting:

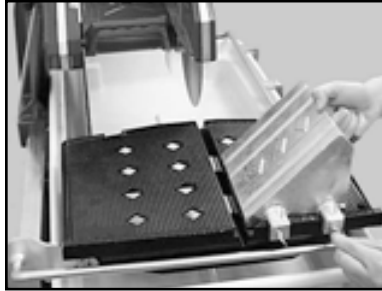
NOTE: To cut 45° Miters, the 45° Bullnose Miter Guide (MK Diamond Part No. 134585-MK) should be used.



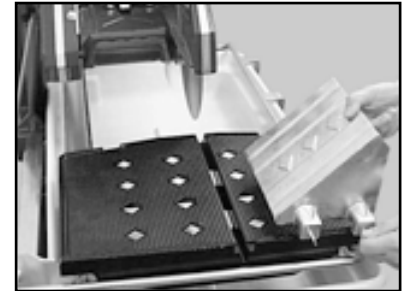
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



(A)
Remove the Adjustable
Cutting Guide



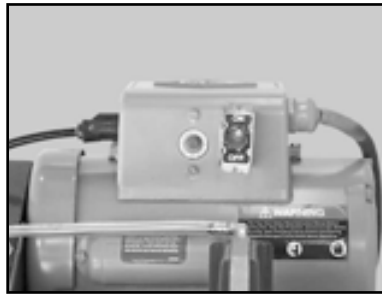
(B)
Place the 45° Miter
Guide on the Ruler/Stop



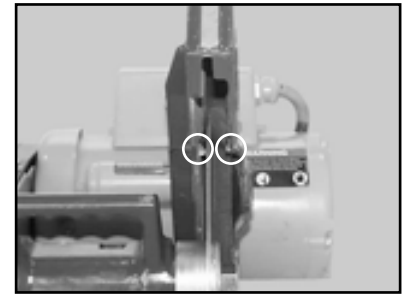
(C)
Position the 45° Miter
Guide and tighten the retaining
thumbscrew



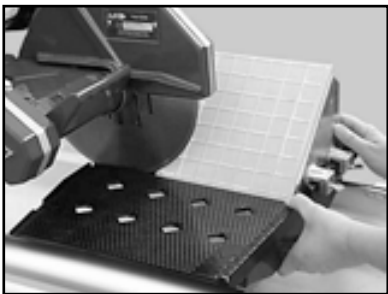
(D)
Position the tile on the 45°
Miter Guide and the
Ruler/Stop



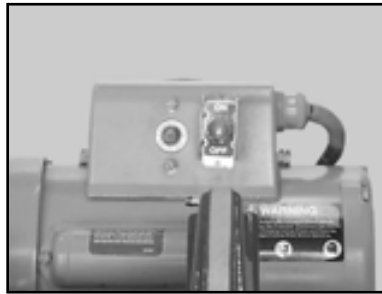
(E)
Turn the motor ON



(F)
Verify proper cooling flow on
both sides of the blade (See
Maintenance Section to in-
crease/decrease flow)



(G)
Perform the cut



(H)
Turn the motor OFF when
work is complete

Off-angle Cutting:

NOTE: To cut angles other than 45° angles or Miters, a 90° Protractor (MK Diamond Part No. 134569-MK) should be used.



CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



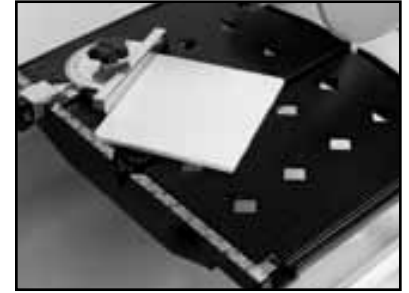
(A)

Place the 90° Protractor on the Ruler/Stop



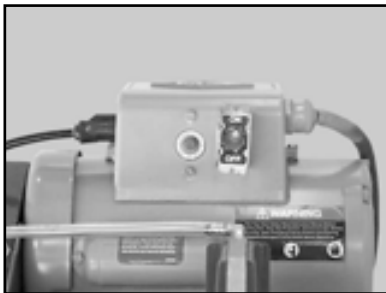
(B)

Set the desired angle and tighten the thumbscrew and tighten retaining thumbscrews



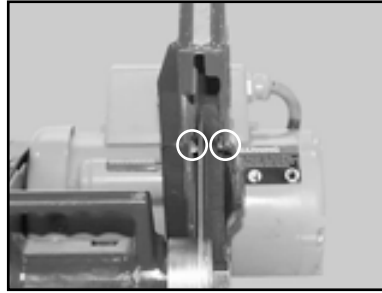
(C)

Position the tile against the 90° Protractor and the Ruler/Stop



(D)

Turn the motor ON



(E)

Verify proper cooling flow on both sides of the blade



(F)

Perform the cut



(G)

Turn the motor OFF when work is complete Maintenance Section to increase/decrease flow)

ADJUSTING THE CUTTING HEAD

CAUTION The Cutting Head is heavy. Care must be used when changing the position of the Cutting Head.



(A)
Remove the blade and then
Adjusting Knob



(B)
Remove the Cutting Head from
the rear pivot hole



(C)
Install the Cutting Head onto the
front pivot hole



(D)
Move Cutting Head Stop to
down position



(E)
Install the Adjusting Knob



(F)
Install Diamond Blade. Set
cutting depth approx. 1/4 to 1/2
inch below the surface of the
Movable Cutting Table

NOTE: For small tiles (6" tile or smaller) the Cutting Head should be in the rear pivot hole and the Post should be in the forward post retaining hole. For large tiles and maximum cutting length, the Cutting Head should be in the front pivot hole and the Post should be in the rear post retaining hole.

NOTE: Move Cutting Head Stop in upward positions when using rear pivot hole and in the down position when using front pivot hole.



For maximum cutting length, the Cutting Head should be in the front pivot hole and the Post should be in the rear post retaining hole.

ADJUSTING THE POST FOR MAXIMUM CUTTING LENGTH

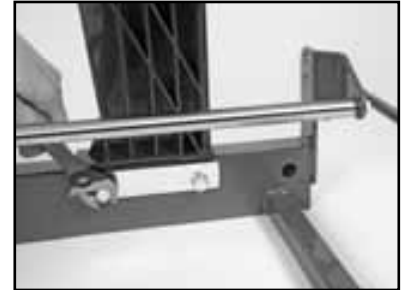
⚠ CAUTION The Cutting Head and Post are heavy. Care must be used when changing the position of the Cutting Head.



(A)
Remove Water Basin



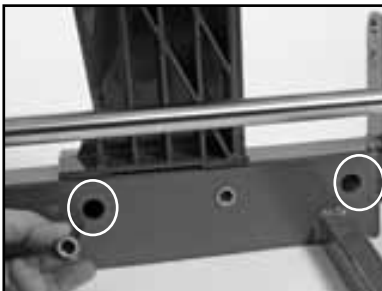
(B)
Remove the Cutting Head (See
Adjusting the Cutting Head)



(C)
Loosen the Post Support Plate
and Retaining Bolts



(D)
Remove the Post Support Plate
and Retaining Bolts



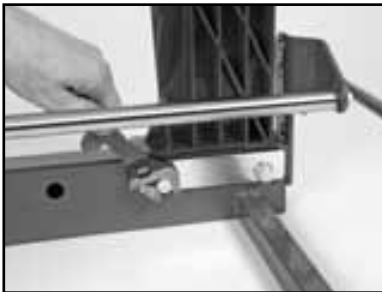
(E)
Remove Standoff, and insert in
rear post retaining hole



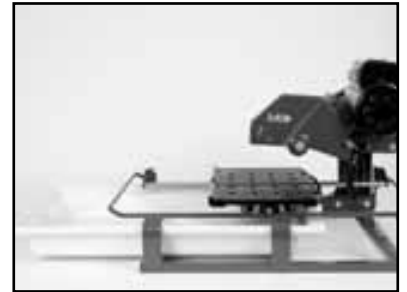
(F)
Relocate the Post to the rear
Post retaining holes



(G)
Install the Cutting Head in rear
Pivot Hole (See Adjusting the
Cutting Head)



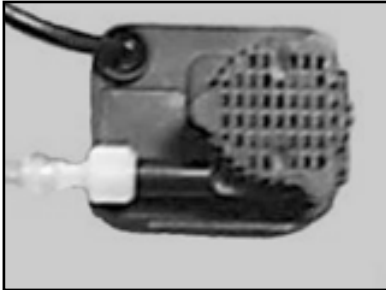
(H)
Install the post support and
tighten Retaining Bolts



(I)
Install the Water Basin and
blade

CLEANUP:

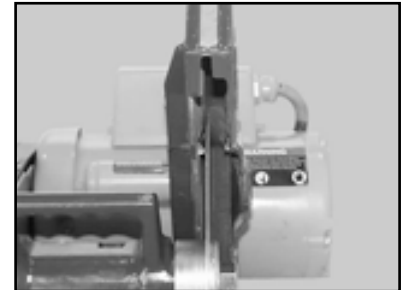
- NOTE:**
1. If an external water source was used, steps A through C may be skipped.
 2. Dispose of waste water in accordance with applicable Federal, State and Local laws.



(A)
Clean the Water Pump
suction of all debris



(B)
Place the Water Pump in an
external container



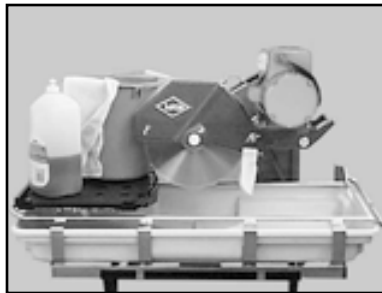
(C)
Run the MK-101 until clear
water is seen at the blade cool-
ing ports (Approx. 1 minute)



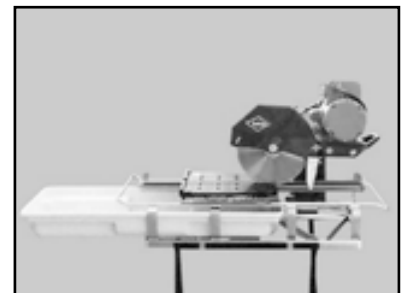
CAUTION Ensure the saw is disconnected before completing the remainder of the cleanup process.



(D)
Ensure the ON/OFF Switch is
in the OFF position and
unplug the GFCI from the
Power source



(E)
Clean the MK-101 with soap
and clean water



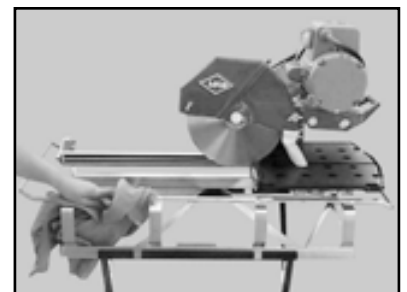
(F)
Remove the Water Basin
from the MK-101



(G)
Clean the Water Basin

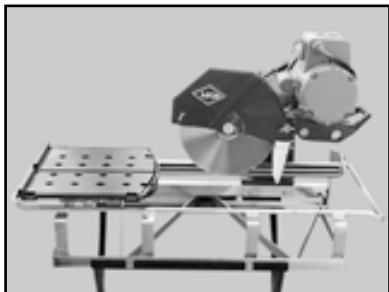


(H)
Clean the Movable Cutting
Table Guide Bar



(I)
Clean the Movable Cutting
Table Roller Wheel Frame
Support

! CAUTION Ensure water is not forced into the motor casing when cleaning.



(J)

Clean the remainder of the
MK-101

MAINTENANCE:

New Maintenance:

Perform the following after initial purchase and operation of the MK-101.



(A)

Check and adjust V-belt
tension following 1st 48 hours
of operation (See V-belt
Inspection)

Maintenance Following Use:

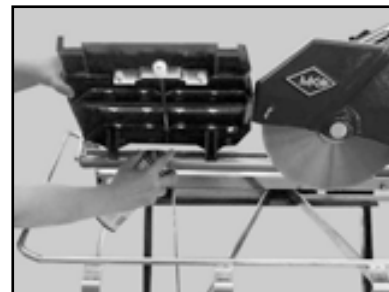
To extend the life of the MK-101, the following procedure should be performed after each use. Lubricate all points listed below with light oils such as, 3 in 1, WD-40, etc.



(A)
Ensure the ON/OFF Switch is
in the OFF position



(B)
Unplug MK-101*



(C)
Lubricate the Guide Bar



(D)
Lubricate the Roller
Wheel Assembly

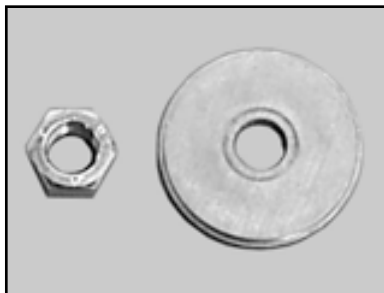
* A GFCI wall socket is the preferred protective device.

Monthly Maintenance:

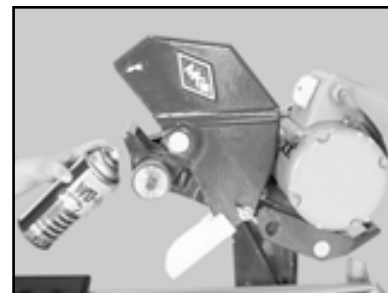
The following maintenance should be performed Monthly.



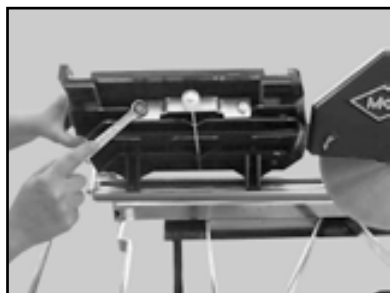
(A)
Remove the Diamond Blade



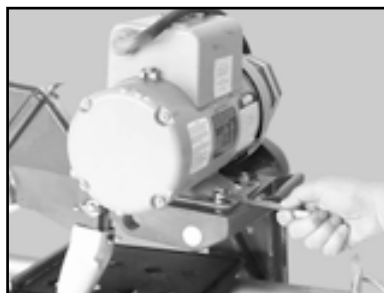
(B)
Lubricate the Outer Flange
and Retaining-nut



(C)
Lubricate the Inner Flange



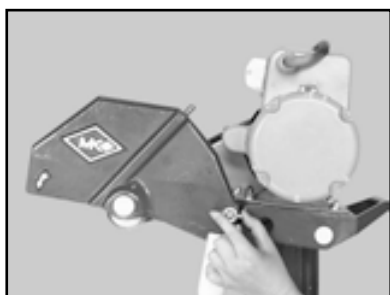
(D)
Verify the Roller Wheel
Assembly is tight and in
good condition



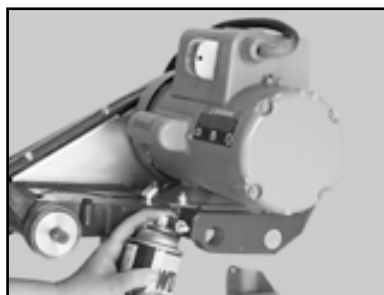
(E)
Verify all motor mounting
Bolts are tight



(F)
Verify the Motor Adjustment
Strap is tight



(G)
Remove the Blade Guard



(H)
Lubricate the Blade Guard
Pivot Shaft



(I)
Remove the Cutting Head (See
Adjusting the Cutting Head)



(J)
Lubricate the Cutting Head
Adjustment Knob



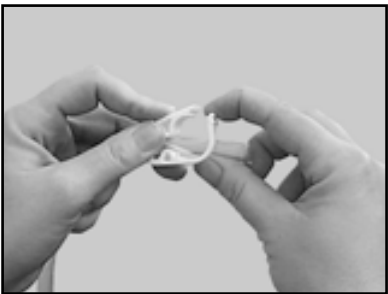
(K)
Lubricate the Cutting Head
Adjustment Knob retaining
holes



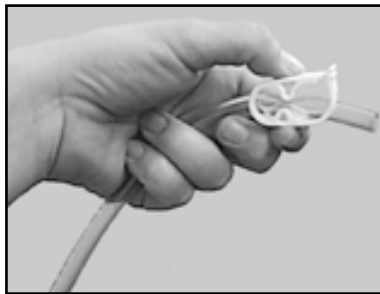
(L)
Lubricate the Cutting Head
Pivot Shaft

FLOW ADJUSTMENT:

NOTE: If flow to the diamond blade requires adjustment, perform the following actions.



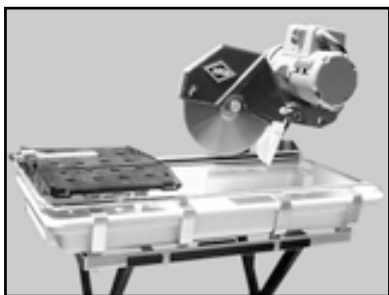
(A)
Increase cooling flow by releas-
ing the Flow Adjusting Clamp



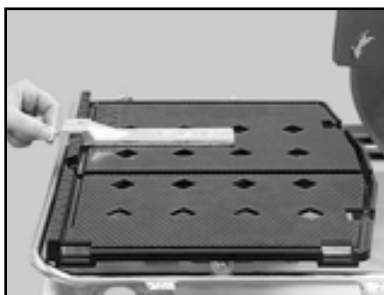
(B)
Reduce cooling flow by
pressing down on the Flow
Adjusting Clamp

BLADE DRESSING:

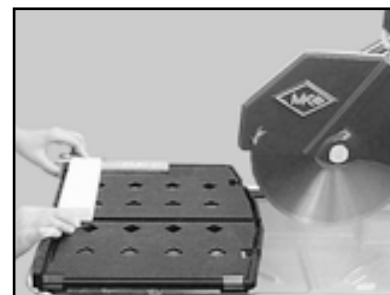
Like most cutting instruments, a diamond blade performs best when it is dressed. Over time and use, diamonds the blade will become smoothed or “glazed” over. This will reduce grinding efficiency and may cause the blade to “wander” or bend giving the illusion of an alignment problem. When this occurs, the blade will need to be dressed. The diamond blade can be dressed using the MK Dressing Stick (part number 152972) and by following the steps below.



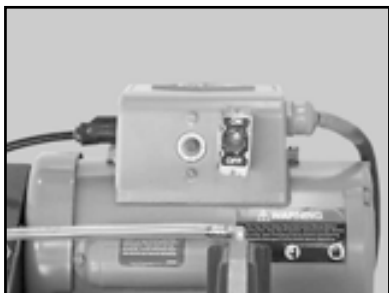
(A)
Setup the MK-101 for operation
(See Setup, Adjustment
and Operation)



(B)
Set the Adjustable Cutting
Guide to cut a 1/16-strip



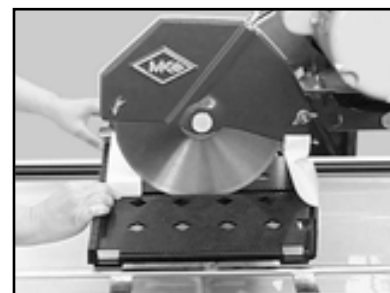
(C)
Position the Dressing Stick



(D)
Turn the motor ON



(E)
Verify proper cooling flow on
both sides of the blade (See
Maintenance Section to
increase/decrease flow)



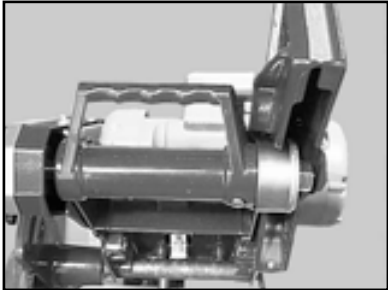
(F)
Cut the Dressing Stick 7 or 8
times to dress the Blade



(G)
Ensure the ON/OFF Switch
is in the OFF position

DIAMOND BLADE CHANGE-OUT:

NOTE: When installing the Retaining Screw, do not “cross-thread” and DO NOT over tighten the screw.



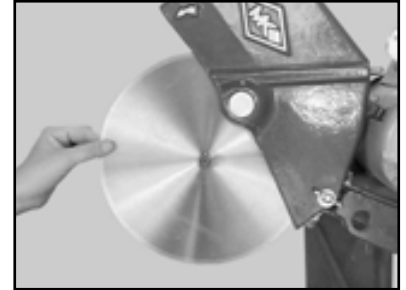
(A)

Locate the Shaft Lock pushbutton on the underside of the Cutting Head



(B)

Remove Retaining Nut and Outer Flange, depress and hold the Shaft Lock pushbutton and loosen



(C)

Remove the Diamond Blade



(D)

Install the Diamond Blade onto Blade Shaft



(E)

Verify the Blade is seated on the Blade Shaft and direction of rotation is correct



(F)

Install Retaining Nut and Outer Flange, depress and hold the Shaft Lock pushbutton and tighten

V-BELT INSPECTION, ADJUSTMENT AND REPLACEMENT:

MK-101 is designed with a power transmission V-belt. In order to ensure the MK-101 operates at peak efficiency, the V-belt should be inspected monthly, and change if the V-belt shows damage and/or excessive wear.

NOTE: 1. When a new belt is installed, it should be inspected and re-tensioned after the first forty-eight (48) hours of operation.



(A)
Ensure the ON/OFF Switch
is in the OFF position and
unplug saw



(B)
Unplug the GFCI from the
Power source*



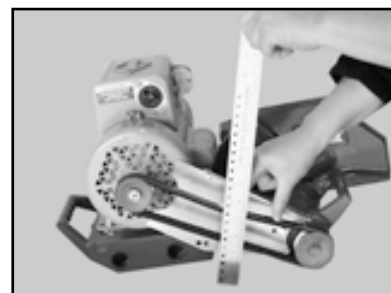
(C)
Remove the Cutting Head (See
Adjusting the Cutting Head



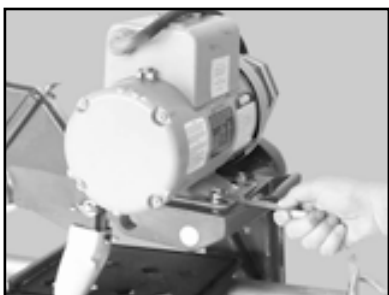
(D)
Remove the Belt Guard.
Loosen all three bolts



(E)
Inspect the V-belt for cracks,
Fraying, separation and wear.
Go to step G if
replacement required



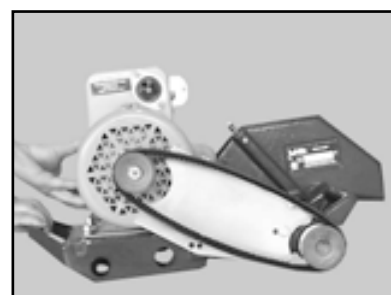
(F)
Check the belt for proper ten-
sion if tension is correct, go to
step R (proper tension 1/8-
inch)



(G)
Loosen the motor mounting
bolts, if re-tensioning only go to
step N



(H)
Loosen the Motor Adjustment
Strap



(I)
Push the motor toward the front
of the Cutting Head to loosen
the V-belt

* A GFCI wall socket is the preferred protective device.



(J)
Remove the V-belt



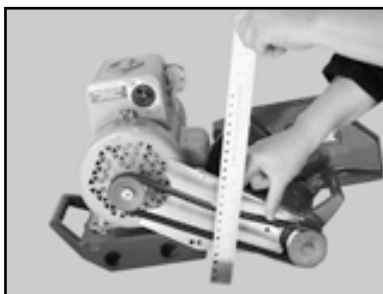
(K)
Install the new V-belt
(MK Diamond Part No. 158194)



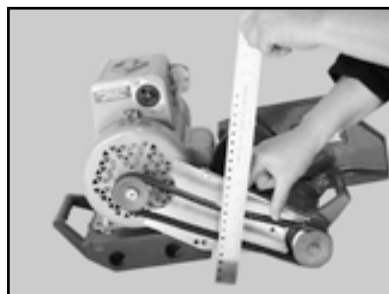
(L)
Verify the V-belt is seated in the
grooves of both pulleys



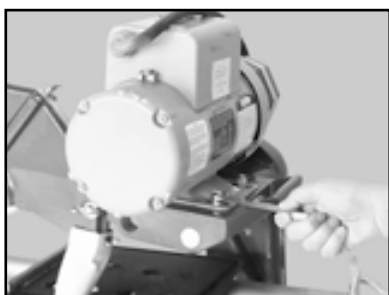
(M)
Tighten the Motor Adjustment
Strap to remove slack



(N)
Check V-belt tension
(proper tension 1/8-inch)



(O)
Repeat steps N and O until
proper V-belt tension is
achieved



(P)
Tighten the motor
mounting bolts



(Q)
Install the Belt Guard and
tighten bolts

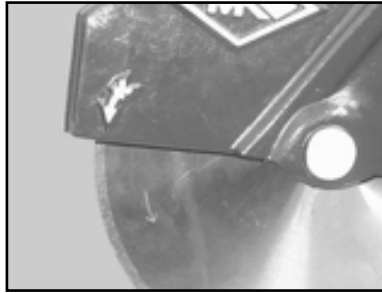
TROUBLESHOOTING:

Blade will not cut properly:



(A)

Check for Smoothness or
“Glazing” (Dress blade if
needed)



(B)

Check for proper blade rotation



(C)

Ensure the Blade Core
is not bent



(D)

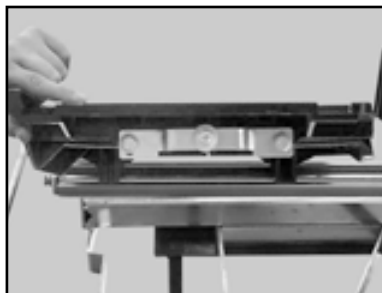
Verify the blade is correct for
the material being used

Movable Cutting Table Does Not Move Correctly:



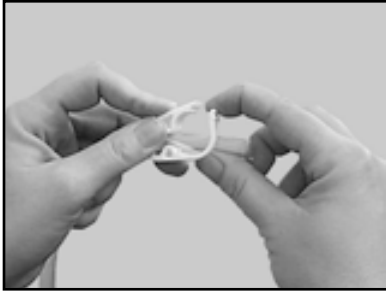
(A)

Check the Guide Bar and
Frame for cleanliness –
clean if dirty

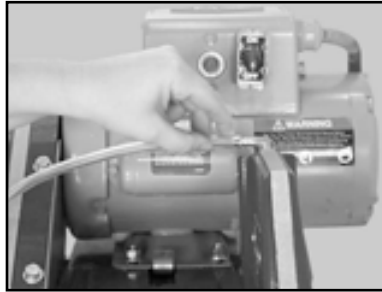


(B)

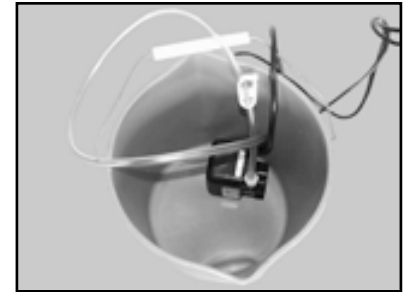
Check the Movable Cutting
Table Roller Wheels for wear –
replace if necessary

Cooling Flow:

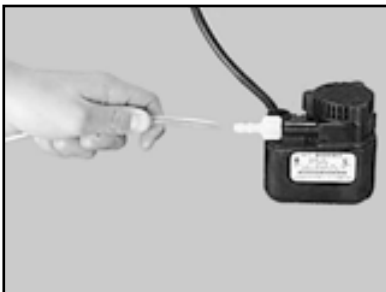
(A)
Verify the cooling flow
Adjusting Clamp is open



(B)
Remove the Cooling Transfer
Tube from the Blade
Guard inlet



(C)
Place Pump into a bucket of
water and check flow



(D)
Remove the Cooling Transfer
Tube and check for flow



(E)
Remove the Pump Discharge
Fitting and check for flow



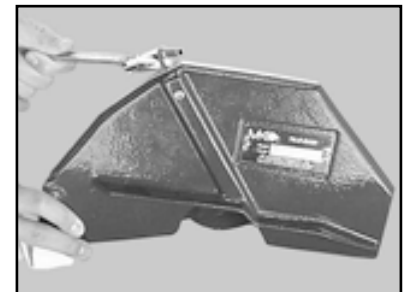
(F)
Remove the Pump Intake
Screen and check for debris –
clean the screen if necessary



(G)
Remove the 3 Pump Casing
Retaining Screws



(H)
Remove the Pump Casing and
check for restriction in the
casing. Check the Impeller
damage



(I)
Remove the Blade Guard
Intake Fitting

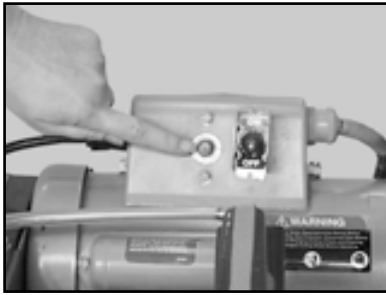
NOTE: “Rodding” cooling channels is performed by inserting a small wire rod through the cooling inlet on top of the Blade Guard and directing the rod out through each of the cooling flow tubes located on the underside of the Blade Guard. The cooling channels should be “rod-ded” until all ports are free of foreign debris.



(J)
Remove the Cooling Channel
cover screws



(K)
Rod the Cooling Channels
and then recheck flow

BLADE STOPS TURNING:

(A)
Allow the motor to cool and
depress motor Overload
Reset Switch



(B)
Verify all plugs are
fully installed*



(C)
Check to see if the Ground
Fault Circuit Interrupter (GFCI)
is tripped*



(D)
Verify the circuit breaker is at
least 20 amps – if not, move to
a 20-amp circuit

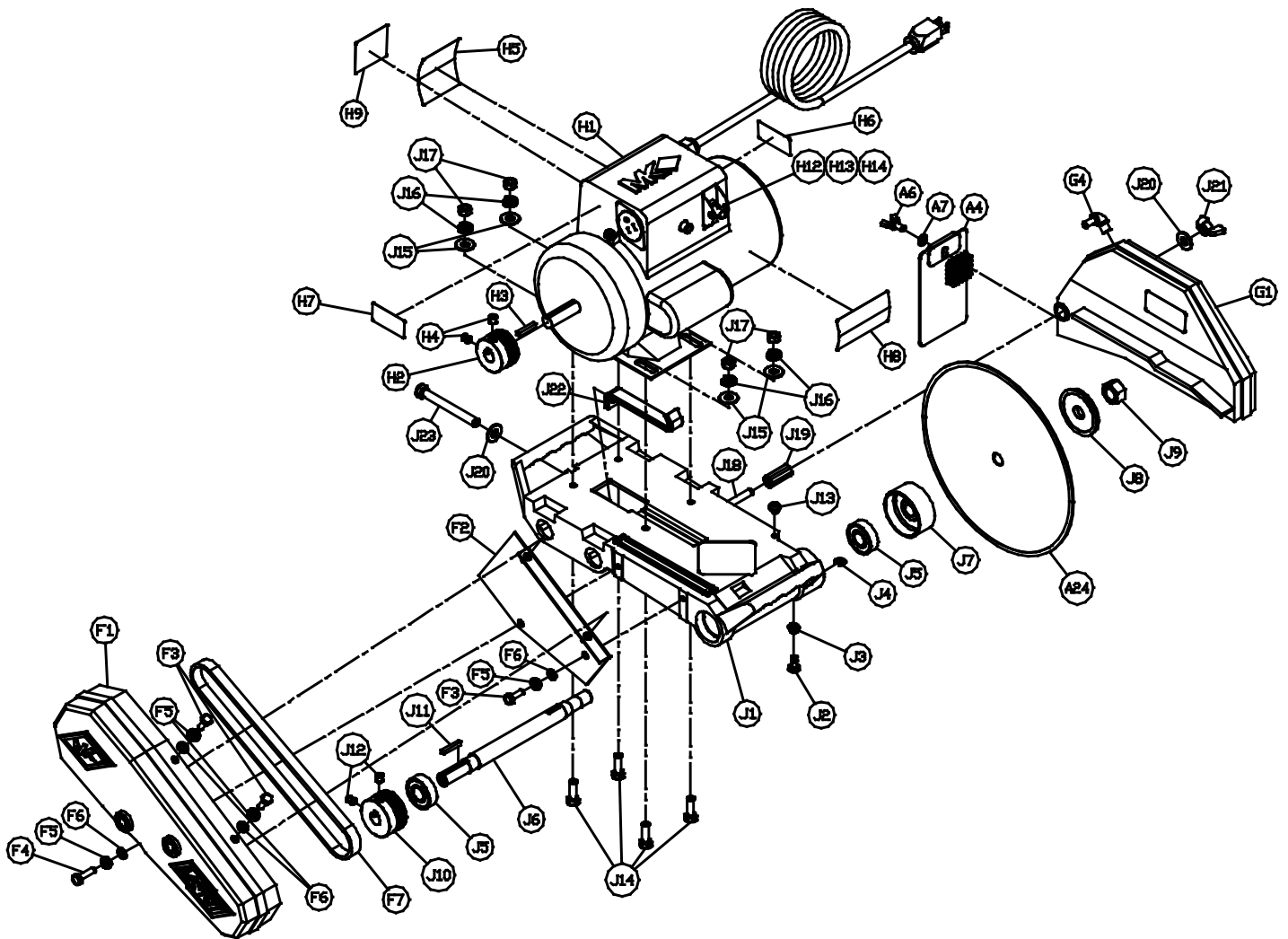


(E)
Verify circuit breaker is not
tripped, if it is tripped – reset
the circuit breaker once



(F)
Check power source voltage is
115V, if it is not 115V – move to
another circuit

* A GFCI wall socket is the preferred protective device.



ITEM	DESCRIPTION	QTY	PART #
A	ACCESSORIES	-	-
A1	CARTON, ACCESSORY PACK, 101	1	153366
A2	FOAM, ACCESSORY PACK CARTON	1	154022
A3	WRENCH, 15/16 CLOSED END	1	134684
A4	GUARD, SPLASH	1	160310
A6	WINGSCREW, 1/4-20 X 1/2	1	151888
A7	WASHER, 1/4 SAE FLAT	1	151915
A8	PUMP, WATER, G-150A	1	151271
A9	FITTING, PLASTIC, 1/4 FNPT X 1/4 BARB	1	128397
A10	HOSE, VINYL, 1/4 ID	6'	132951
A11	CLAMP, FLOW, 1/4-1/2	1	154394
A13	RIP GUIDE, LARGE DIE CAST (COMP)	1	159751
A14	MITER, LARGE BULLNOSE (COMP)	1	153201
A15	GUIDE, DUAL FLAT 45 (COMP)	1	134577
A16	PROTRACTOR, TILE SAW	1	159429
A17	DRESSING STICK, 8 X 2 X 1, 60 GRIT	1	152792-RW
A18	EXTENSION, 2.25 X 3/4 DIA. BELT GUARD	1	155711
A19	CORD, TWIST-LOCK GFCI, 120V/15A	1	157421
A20	OWNER'S MANUAL, MK-101	1	153754
A21	CARD, MK WARRANTY REGISTRATION	1	155037
A22	LABEL, DO NOT RETURN	1	157063
A23	SELL SHEET, TILE ACCESSORY	1	156915
A24	STAND, FOLDING, UNIVERSAL, W/CARTON (156035)	1	151889
A25	BLADE, MK-100, 10 X 060 X 5/8	1	154380
A26E	TAG, SERIAL NUMBER, BLANK	1	157500
A27	PLUG, 10A AUSTRALIA	1	156267
A28	CORD, L5-15X25' EXTENSION	1	158111
A29	MITER, SMALL BULLNOSE (COMP)	1	134585
A30	CLIP, TABLE LOCK, 30 DEG	1	160331-1
A31	CLIP, TABLE LOCK, 50 DEG	1	160331-3
A32	DRIVE SCREW, ROUND HEAD, #7 X 5/16	2	157849
A33	HOLDER, TOOL ACCESSORY	1	160155
A34	LID, ACC HOLDER DRESSING STICK-CLEAR	1	160156
A35	LID, ACC HOLDER MANUAL-CLEAR	1	150512
A36	CLAMP, HOLDING, PUMP	1	162054
A37	SCREW, WING, 1/4-20X1/2	2	151888
A38	NUT, HEX, 1/4X20	2	151893
C	FRAMES	-	-
C1	FRAME, 101	1	153003

ITEM	DESCRIPTION	QTY	PART #
C2	PAN, PLASTIC, 101	1	150634
C3	PIN, 3/16 X 3/8 ROLL	2	151783
C4	PLATE, ADJUSTMENT	2	151758
C5	PLUG, RUBBER DRAIN	1	153439
C7	DRAIN PLUG, HD RENTAL	1	159529
C8	STRAP, 9" DRAIN PLUG	1	159530
D	POSTS	-	-
D1	POST, 101 MK RED (COMP)	1	155670
D2	SHAFT, 10.63" PIVOT, 101	1	153254
D2A	SHAFT, 12.88" PIVOT, 101PRO	1	155530
D3	SCREW, 3/8-16 X 1/2 SOCKET HEAD SET	1	153710
D4	PLATE, SUPPORT	1	155671
D5	SCREW, 3/8-16 X 2 1/2 HEX HEAD CAP	2	156030
D6	WASHER, 3/8 SPLIT LOCK	2	150925
D7	KNOB, 3/8-16 X 1.5 MK ADJUSTMENT	1	156770-02
D8	WASHER, 3/8 SAE FLAT	1	150923
D9	PLASTIC POST COVER	1	160157
E	STOP, CUTTING HEAD	-	-
-	KIT, STOP, 10" CUTTING HEAD	1	157728-MK
E1	STOP, 10" CUTTING HEAD	1	157728
E2	SCREW, 1/4-20 X 1 1/4 HEX HEAD CAP	1	157145
E3	WASHER, 1/4 SPLIT LOCK	1	152591
E4	SHEET, CUTTING HEAD STOP INSTRUCTION	1	157728-IS
F-J	CUTTING HEAD ASSEMBLIES	-	-
-	ASSEMBLY, DC CUTTING HEAD, MK-101	1	158478
	BELT GUARDS	-	-
F1	BELT GUARD, MK-101 (COMP)	1	158319-01
F2	BRACKET, INNER BELT GUARD, 100/101	1	158611
F3	SCREW, 1/4-20 X 3/4 HEX HEAD CAP	3	152370
F4	SCREW, 1/4-20 X 1 HEX HEAD CAP	1	152676
F5	WASHER, 1/4 SPLIT LOCK	4	152591
F6	WASHER, 1/4 SAE FLAT	4	151915
F7	BELT, 260J6 MICRO-V	1	158194
G	BLADE GUARD ASSEMBLY		
-	ASSEMBLY, BLADE GUARD, MK-101	1	152582
G1	BLADE GUARD, 101/115 (COMP)	1	153659
G2	TUBE, WATER	2	155389
G3	SCREW, 5/16-18 X 1/2 SOCKET HEAD SET	3	152607
G4	ELBOW, 1/8 MNPT X 1/4 BARB 90° BRASS	1	154652
H	MOTORS		
	ASSEMBLY, MOTOR, 1-1/2HP\120V\60HZ\30A SBOX	1	159709
H1	MOTOR, 1-1/2HP\120V\60HZ	1	160127

ITEM	DESCRIPTION	QTY	PART #
H2	PULLEY, 6J17 X 5/8 BORE	1	158214
H3	KEY, 3/16 X 3/16 X 1-1/8 SQUARE	1	150344
H4	SCREW, 5/16-18 X 3/8 SOCKET HEAD SET, CUP POINT	2	157083
H5	LABEL, WARNING MOST MOTOR..., 2 3/4 X 2 7/16	1	155672
H6	LABEL, CAUTION, GFCI, 1 X 2 1/8	1	155678
H7	LABEL, CAUTION, 5 AMP MAX., 1 X 2-1/8	1	154822
H8	LABEL, WARNING, READ OWNER'S MANUAL, 1-3/4 X 3-3/8	1	155806
H9	LABEL, MK SERVICE INFO., 2 1/8 X 1-13/16	1	155038
H10	LABEL, MK CHECKLIST	1	157459
H11	SCREW, 1/4-20 X 1 HEX HEAD CAP	2	152676
H18	BOX, TOP ENTRY, 30A SWITCH (COMP)	1	159487
H19	COVER, 30A SWITCH BOX (COMP)	1	159539
H20	LEVER, ACTUATOR, 30A SWITCH BOX (COMP)	1	159540
H21	PLATE, MOUNTING, 30A SWITCH	2	159489
H22	LEVER, ON/OFF, 30A SWITCH BOX	1	159490
H23	BUSHING, NYLON, 30A SWITCH BOX	1	158799
H24	SEAL, URETHANE, 30A SWITCH BOX	1	159492
H25	GASKET, 30A SWITCH BOX	1	159491
H26	SWITCH, 30A/2HP/120V/DPST	1	159488
H27	CONNECTOR, LTF11 CORD	1	159582
H28	SCREW, 6-32 X 5/16 FLAT HEAD PHILLIPS MACHINE	6	159493
H29	SCREW, 10-24 X 1/4 PAN HEAD PHILLIPS MACHINE	1	159494
H30	SCREW, 6-32 X 5/8 PAN HEAD PHILLIPS MACHINE	4	157393
H31	SCREW, 10-24 X 5/16 SLOTTED HEX WASHER HEAD GROUNDING	1	159597
H32	WASHER, #10 SAE FLAT	1	154369
H33	WASHER, #10 LOCK, INTERNAL TEETH	2	158336
H34	TERMINAL, 16-14 X #10 RING, NON-INSULATED	1	154540
H35	RECEPTACLE, PUMP	1	159828
H36	CORD, POWER	1	159829
H37	WIRE, MK-100/101 JUMPER	2	160519
H38	LABEL, HOME DEPOT TOOL RENTAL	1	160602
J	CUTTING HEAD SUBASSEMBLIES		
-	SUB-ASSEMBLY, DC CUTTING HEAD, 100/101	1	158191
J1	CUTTING HEAD, DC, 100/101, MK RED (COMP)	1	158224
J2	PIN, BLADE SHAFT LOCK	1	158200
J3	SPRING, BLADE GUARD LOCK	1	158201
J4	E-RING, 1/4 RETAINING	1	158202
J5	BEARING, 17MM X 40MM X 12MM BALL (6203-2NSE)	2	137711
J6	SHAFT, BLADE 100/101	1	158222
J7	FLANGE, 2-3/8 INNER	1	137737
J8	FLANGE, 2-3/8 OUTER	1	135830
J9	NUT, 5/8-18 HEX	1	135848
J10	PULLEY, 6J19 X 5/8 BORE	1	158199

ITEM	DESCRIPTION	QTY	PART #
J11	KEY, 3/16 X 3/16 X 1 1/8 SQUARE	1	150344
J12	SCREW, 5/16-18 X 3/8 SOCKET HEAD SET, CUP POINT	2	157083
J13	BUMPER, 1/2 DIA RUBBER	1	152674
J14	SCREW, 5/16-18 X 1 HEX HEAD CAP	4	151743
J15	WASHER, 5/16 SAE FLAT	4	151754
J16	WASHER, 5/16 SPLIT LOCK	4	151747
J17	NUT, 5/16-18 HEX	4	101196
J18	SCREW, 5/16-18 X 3 HEX HEAD TAP	1	162473
J19	PIVOT, BLADE GUARD	1	153208
J20	WASHER, 3/8 SAE FLAT	2	150923
J21	WING NUT, 5/16-18 NYLOCK	1	151746
J22	STRAP, MOTOR ADJUSTMENT	1	152673
J23	SCREW, 3/8-16 X 3 1/2 HEX HEAD FULL THREAD	1	153147
-	ASSEMBLY, DC TABLE, MK-101	1	158477
K	GUIDE BARS	-	-
K1	BAR, 3/4 X 32 GUIDE, 101	1	134759
K2	COVER, GUIDE BAR, 120° X 35"	1	158403
K3	SPACER, GUIDE BAR COVER, 101	2	152393
K4	SCREW, 5/16-18 X 1 HEX HEAD CAP	2	151743
K5	WASHER, 5/16 SPLIT LOCK	2	151747
K6	WASHER, 5/16 SAE FLAT	2	151754
L	LINEAR BEARINGS	-	-
L1	LINEAR BEARING, 101 (COMP)	1	135855
L2	SCREW, 5/16-18 X 1 HEX HEAD CAP	2	151743
L3	WASHER, 5/16 SPLIT LOCK	2	151747
L4	WASHER, 5/16 SAE FLAT	2	151754
M	TABLES	-	-
M1	TABLE, 100/101 (COMP)	1	157660
M2	TABLE EXTENSION, 101PRO (COMP)	1	154499
M3	SCREW, 1/4-20 X 5/16 SOCKET HEAD SET	2	154226
M4	SHIM, .004 X 5/16 ID X 1/2 OD	4	152519
M5	WASHER, 5/16 SAE FLAT	2	151754
M6	WASHER, 5/16 SPLIT LOCK	2	151747
M7	SCREW, 5/16-18 X 1 HEX HEAD CAP	2	151743
M8	TABLE EXTENSION, FRONT (COMP)	1	158215
M9	SCREW, 1/4-20 X 5/16 SOCKET HEAD SET	2	154226
N	DUAL ROLLER WHEEL		
-	ASSEMBLY, DUAL ROLLER WHEEL	1	159549
N1	BRACKET, ROLLER WHEEL	1	154021
N2	WHEEL, ROLLER	1	151799
N3	SCREW, 1/4-20 X 1 1/2 HEX HEAD CAP	1	151914
N4	WASHER, 1/4 SAE FLAT	1	151915
N5	NUT, 1/4-20 HEX	1	151893

THEORY OF DIAMOND BLADES:

Diamond blades do not really cut; they grind the material through friction. Diamond crystals, often visible at the leading edge and sides of the rim/segment, remove material by scratching out particles of hard, dense materials, or by knocking out larger particles of loosely bonded abrasive material. This process eventually cracks or fractures the diamond particle, breaking it down into smaller pieces. As a result, a diamond blade for cutting soft, abrasive material must have a hard metal matrix composition to resist this erosion long enough for the exposed diamonds to be properly utilized. Conversely, a blade for cutting a hard, non-abrasive material must have a soft bond to ensure that it will erode and expose the diamonds embedded in the matrix. These simple principles are the foundation of “controlled bond erosion”.



Types of Cutting:


There are two basic types of cutting-Dry or Wet. The choice of which type of blade to use depends on

- The requirements of the job
- The machine/tool utilizing the diamond blade
- The preference of the operator

In the case of DRY cutting, the overwhelming popularity and quantity of hand-held saws and the flexible nature of MK Diamond blades to professionally handle most ceramic, masonry, stone and concrete materials, make the DRY cutting blade a very attractive tool. When using a DRY blade, the user must be aware of distinct operating practices to ensure optimum performance. DRY cutting blades require sufficient airflow about the blade to prevent overheating of the steel core. This is best accomplished by shallow, intermittent cuts of the material with periods of “free-spinning” (for several seconds) between each cut, to maximize the cooling process.

For WET cutting applications, MK has the exact blade to compliment both the material to be cut and the wet cutting machine to be used. During cutting operations, liberal amounts of water act as a coolant to support the cutting effectiveness and longevity of the WET blade. Additionally, using water adds to the overall safety of cutting operations by keeping the dust signature down.

Know All You Can About the Material You Wish to Cut

ACCESSORIES:			
ITEM	NUMBER	DESCRIPTION	
1.	137166	MK-200. 10 X 5/8 ARBOR Premium grade Diamond Blade for smooth, chip-free cutting on tile.	
2.	128074	MK-215, 10 X 5/8 ARBOR Supreme grade diamond blade for hard materials	
3.	153252	MK-315, 10 X 5/8 ARBOR Supreme super hi-rim diamond blade	
4.	134577-MK	DUAL 45° FLAT ANGLE GUIDE	
5.	153201-MK	45° Miter	
6.	134569-MK	90° PROTRACTOR	
7.	152792	DRESSING STONE	
8.	152610	GROUND FAULT CIRCUIT INTERRUPTER	
9.	151889	UNIVERSAL STAND	

ORDERING INFORMATION:

You may order MK Diamond products through your local MK Diamond distributor or, you may order direct from MK Diamond.

NOTE: There is a \$25.00 minimum order when ordering direct from MK Diamond. All purchases must be made using VISA or MasterCard.

When ordering direct from MK Diamond, please have the following information ready before calling:

- The Model Number of the saw
- The Serial Number of the saw
- Where the saw was purchased and when
- The Part Number for the part(s) being ordered
- The Part Description for the part(s) being ordered

All parts may be ordered by calling toll free to – 800 421-5830 or 310 539-5221 and asking for Customer Service. For technical questions, call – 800 474-5594.

RETURN MATERIALS POLICY:

To expedite the service relative to the return of a product purchased through MK Diamond, please observe the following:

NOTE: When returning all items, they must have been purchased within the previous twelve (12) months.

- Have the Model Number of the saw
- Have the Serial Number of the saw
- Have the location of where the saw was purchased
- Have the date when the saw was purchased
- Contact Customer Service for approval to return the item(s)
- Obtain a Returned Goods Number (RGA) authorizing the return
- Follow the packaging instructions in the following section
- Ensure your item(s) are prepaid to the destination

For returned items, call toll free to – 800 421-5830 or 310 539-5221 and ask for Customer Service. For technical questions, call – 800 474-5594 or 310 257-2845.

PACKAGING INSTRUCTIONS:

- Remove the Blade guard and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: MK-101, Diamond Blade, Blade guard and Support Angle Assembly and Adjustable Cutting Guide (Other Accessories are not required)
- Package the unit in its original container or one of comparable size (do not ship the unit partially exposed)
- Ensure all parts are secured in the packaging to prevent moving

AUTHORIZED SERVICE CENTERS:

For quicker repair time, you may contact MK Diamond Customer Service, toll free, at – **800 421-5830** or **310 539-5221** for the Authorized Service Center closest to you. For technical questions, call – **800 474-5594**.

MK-101 Tile Saw
OWNERS MANUAL & OPERATING INSTRUCTION
DOCUMENT NO. 153754



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